Strengthening Partnerships

NOAA, BOEM, BSEE in the Arctic

WORKSHOP REPORT

Promoting effective collaboration among NOAA, BOEM, and BSEE in support of science-based decision-making related to energy activities on the outer continental shelf in the Arctic

23–24 February 2012
Anchorage, Alaska

NOAA
National Oceanic and Atmospheric Administration
U.S. Department of Commerce

BOEM
Bureau of Ocean Energy Management

BSEE
Bureau of Safety and Environmental Enforcement

National Oceanic and Atmospheric Administration
Department of Commerce

Bureau of Ocean Energy Management
Department of the Interior

Bureau of Safety and Environmental Enforcement
Department of the Interior

Workshop Report

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CONTENTS

2 Background
3 Part I: Understanding Agency Organization and Missions
6 Part II: Identifying Information Needed to Support Management Decisions
7 Part III: Enhancing Collaboration among BOEM/BSEE/NOAA
8 Information Matrix Table
9 Part IV: Identifying Next Steps and Action Items
10 Conclusions
12 Workshop Steering Committee
13 Appendix 1: Memorandum of Understanding between BOEMRE and NOAA
24 Appendix 2: Regional operating procedures between BOEM and NOAA in Alaska
28 Appendix 3: Workshop prospectus
31 Appendix 4: Workshop agenda
35 Appendix 5: Workshop presentations
37 Appendix 6: Workshop participants

Cover photo by Bodil Bluhm, University of Alaska Fairbanks

doi:10.4027/spnbbawr.2012
AK-ADMIN-91

Background

The arctic region is one of the last frontiers on earth. The Arctic is considerably less developed than other U.S. maritime areas, and access to the region is increasing rapidly because of sea ice loss, demand for nonrenewable and renewable resources, capital investment options, and advances in technology. Development and transportation in the Arctic will bring many challenges and increased risk to the region, and new infrastructure and sustained investment will be needed to ensure the arctic ecosystem is protected and managed sustainably. Understanding and minimizing risks in the Arctic will require improved coordination within the federal government and within State of Alaska, tribal, regional, and local governments.

On May 19, 2011, a memorandum of understanding (MOU) was signed between the Department of the Interior (DOI), Bureau of Ocean Energy Management, Regulation, and Enforcement (BOEMRE); and the Department of Commerce (DOC), National Oceanic and Atmospheric Administration (NOAA) (Appendix 1). The intent of the MOU is to ensure that decision-making related to the development of outer continental shelf (OCS) energy resources is based on relevant scientific information and expertise from both agencies, to fulfill the stewardship and conservation of living marine resource and ecosystem responsibilities that fall under the agencies' respective authorities. On October 1, 2011, the DOI formally established two new, independent bureaus: the Bureau of Ocean Energy Management (BOEM) and the Bureau of Safety and Environmental Enforcement (BSEE). These two bureaus officially replaced BOEMRE.

As a first step toward implementing the MOU in Alaska, regional representatives from NOAA's National Marine Fisheries Service (NMFS) and BOEM developed and agreed upon operating procedures that focus on their respective responsibilities and how the two agencies could work together efficiently (Appendix 2). To advance that process further in regard to scientific research, it became apparent that a workshop could offer a valuable forum for discussing how various NOAA line offices, BOEM, and BSEE could promote effective working relationships in Alaska (Appendix 3). In particular, there was a desire to strengthen the processes for identifying information needs and clarifying priorities for undertaking the environmental studies and analyses necessary to support decision-making in all three agencies related to offshore oil and gas development.

The purpose of the workshop was to understand the missions of the three agencies, increase communication, and explore processes and pathways to build strong partnerships (see Appendix 4 for the workshop agenda). The workshop's overall goal was to identify ways to build a sound base of scientific information that would be tapped to minimize risk to the arctic environment, while allowing the development of energy and mineral resources of the arctic OCS to move forward. Specific goals of the workshop included:

1. Refining processes for ensuring the timely identification and communication of research priorities of agencies involved in the U.S. Arctic.

2. Identifying a process for clarifying the end users of such research, and the requisite timelines thereof to ensure products, including final reports, are more fully utilized in decision-making processes.

3. Identifying potential areas for improving the use of science in the governance and stewardship of U.S. arctic marine ecosystems, resource management, and cultural values.

4. Increasing coordination and collaboration on public announcements related to OCS research, scientific priorities, and related activities in the U.S. Arctic.

5. Increasing coordination and improving methodology for more efficient means of commenting on National Environmental Policy Act (NEPA) analyses and other regulatory interactions between BOEM and NOAA.

6. Discussing a strategy on how to engage other agencies, the State of Alaska, and tribal, regional, and local governments in research, coordination, and synthesis efforts.

Part I: Understanding Agency Organization and Missions

During the workshop, agency representatives described their respective organizational structures, missions, responsibilities, and processes for meeting their obligations in the Arctic (Appendix 5). A total of 40 representatives from NOAA, BOEM, and BSEE participated in the workshop (Appendix 6).

NOAA

NOAA's mission is to understand and predict changes in the earth's environment and conserve and manage coastal and marine resources to meet our nation's economic, social, and environmental needs. NOAA is responsible for a variety of activities in marine and coastal ecosystems as mandated by several statutes and authorities. These activities include managing protected species, managing commercial and recreational fisheries, protecting marine and coastal habitats, managing development of the coastal zone, and designating and protecting marine areas of special significance due to their conservation, recreational, ecological, historical, scientific, cultural, archeological, educational, and aesthetic qualities. These activities are conducted pursuant to the Endangered Species Act (ESA), Coastal Zone Management Act (CZMA), Marine Mammal Protection Act (MMPA), Magnuson-Stevens Fishery Conservation and Management Act (MSA), and other statutes and involve appropriate consultation with relevant federal agencies.

NOAA's mission of science, service, and stewardship is critical to the future well-being of our nation and our planet. NOAA's Next Generation Strategic Plan (NGSP 2011, http://www.ppi.noaa.gov/ngsp) defines NOAA's long-term vision, goals, and objectives for 2014-2018. NOAA's annual implementation strategy is described in its Annual Guidance Memo (AGM 2012, http://www.ppi.noaa.gov/see/agm). Four primary goals for NOAA operations are identified in the NGSP and AGM, referred to as (1) Climate Adaptation and Mitigation, (2) Weather-Ready Nation, (3) Healthy Oceans, and (4) Resilient Coastal Communities and Economies. Each NOAA line office supports one or more of these primary goals. Regarding the objectives of this workshop and its focus on the Arctic, it is important to recognize that each of the following NOAA line offices has been tasked with specific responsibilities in the Arctic:

1. National Marine Fisheries Service (NMFS)—sustainable use of marine living resources, stewardship of protected resources, and promoting healthy marine ecosystems.

2. National Ocean Service (NOS)—arctic preparedness (including oil spill response and restoration, charting).

3. Office of Oceanic and Atmospheric Research (OAR)—climate change research (including sea ice forecasting).

4. National Environmental Satellite, Data, and Information Service (NESDIS)—satellite data (including collection, processing, and distribution).

5. National Weather Service (NWS)—weather forecasts and warnings (including arctic coastal and offshore waters).

NOAA will rely heavily on its Arctic Vision and Strategy (http://www.arctic.noaa.gov/docs/NOAAArctic_V_S_2011.pdf), the Interagency Arctic Research Policy Committee (IARPC) 5-year research plan (once finalized), and the National Ocean Council's Arctic Strategic Action Plan ("full content outline," http://www.whitehouse.gov/sites/default/files/microsites/ceq/sap_8_arctic_full_content_outline_06-02-11_clean.pdf), which set short- and long-term objectives. To accomplish these goals, it is essential to establish clear priorities for activities in the Arctic and to build strong partnerships with other federal agencies, as well as with state and tribal governments.

BOEM

BOEM manages the exploration and development of the nation's offshore energy and mineral resources. It seeks to appropriately balance economic development, energy independence, and environmental protection through oil and gas leases, renewable energy development, and environmental reviews and studies. Key functions of BOEM include:

1. The Office of Strategic Resources, which is responsible for the development of the Five Year OCS Oil and Natural Gas Leasing Program (Five Year Program), oversees assessments of the oil, gas, and other mineral resource potential of the OCS; inventories oil and gas reserves and develops production projections; and conducts economic evaluations that ensure the receipt of fair market value by U.S. taxpayers for OCS leases.

2. BOEM regional offices plan and conduct the actual oil and gas lease sales, along with sand and gravel negotiated agreements and official maps and GIS data. BOEM's Office of Leasing and Plans ensures that the requirements and procedures of the Outer Continental Shelf Lands Act are followed in the preparation and conduct of sales listed in the Five Year Program, and that all Exploration Plans and Development and Production Plans are safe and conform to sound conservation practices and do not cause undue or serious harm or damage to the human, marine, or coastal environment.

3. BOEM is responsible for the offshore Renewable Energy Program. The Renewable Energy Program grants leases, easements, and rights-of-way for orderly, safe, and environmentally responsible renewable energy development activities.

4. BOEM's Office of Environmental Programs conducts environmental reviews, including NEPA analyses and compliance documents, for each major stage of energy development planning. These analyses inform the bureau's decisions on the Five Year Program, and conventional and renewable energy leasing and development activities. Additionally, BOEM's scientists conduct and oversee environmental studies through the Environmental Studies Program to provide the

science to be used to inform policy decisions relating to the management of energy and marine mineral resources on the OCS. In the Alaska Region, the Office of Environmental Programs carries out these environmental stewardship responsibilities by administering region-specific environmental research projects and environmental reviews and consultations under environmental laws for OCS energy and mineral resource activities.

5. BOEM is supported by three regional offices in New Orleans, Louisiana; Camarillo, California; and Anchorage, Alaska. The regional offices manage oil and gas resource evaluations, environmental studies and assessments, leasing activities including the review of Exploration Plans, Development and Production Plans, Development Operations and Coordination Documents, fair market value determinations, and geological and geophysical permitting.

A critical part of BOEM's mission is to protect the environment while ensuring safe development of the nation's offshore energy and marine mineral resources. BOEM, as all federal agencies, must consider the potential environmental impacts of exploring and extracting these resources.

For oil and gas development, these efforts begin with the preparation of a programmatic Environmental Impact Statement (EIS) in support of the Five Year Program. After the Secretary of the Interior has decided on the size, timing, and location of lease sales for the 5-year period, lease sale–specific environmental reviews are prepared. Additional environmental reviews are conducted for specific activities such as drilling a well or installing a platform.

Similarly, BOEM is responsible for leasing areas of the OCS for renewable energy (wind, wave, and ocean current technologies) and marine mineral projects (sand and gravel). Leasing of these resources must also undergo an environmental review based on the most recently available scientific information. To accomplish this, BOEM collects information about the environment through funding of ocean research. Cumulatively, these activities enable BOEM to pursue an adaptive and ecosystem-based approach to its stewardship responsibilities.

BOEM develops, conducts, and oversees world-class scientific research specifically to inform policy decisions regarding development of OCS energy and mineral resources. Research covers physical oceanography, atmospheric sciences, biology, protected species, social sciences, economics, submerged cultural resources, and environmental fates and effects. BOEM is a leading contributor to the growing body of scientific knowledge about the nation's marine and coastal environment.

BSEE

BSEE's mission is to enforce safety and environmental regulations relating to the development of energy and mineral resources on the OCS. Functions encompass all field operations including permitting and research, inspections, offshore regulatory programs, oil spill response, and newly formed training and environmental compliance. BSEE works to promote safety, protect the environment, and conserve resources offshore through vigorous regulatory oversight and enforcement. The Offshore Regulatory Program develops standards and regulations to enhance operational safety and environmental protection for the exploration and development of offshore oil and natural gas on the U.S. OCS. The Oil Spill Response Division is responsible for developing standards and guidelines for offshore operators' Oil Spill Response Plans (OSRP) through internal and external reviews of industry OSRPs, to ensure compliance with regulatory requirements and coordination of oil spill drill

activities. It also plays a critical role in the review and creation of policy, guidance, direction, and oversight of activities related to the agency's oil spill response. The division oversees the Unannounced Oil Spill Drill Program and works closely with sister agencies such as the U.S. Coast Guard and Environmental Protection Agency to continually enhance response technologies and capabilities.

Part II: Identifying Information Needed to Support Management Decisions

Dee Williams described how BOEM's Environmental Studies Program (ESP) identifies research priorities and potential projects to support. For the most part, this is a bottom-up process, with project managers consulting with analysts and decision-makers to determine what information will be needed to comply with regulations under NEPA, MMPA, ESA, and other statutes pertaining to oil and gas development on the arctic OCS.

The ESP was established and funded by the U.S. Congress to support the offshore oil and gas leasing program of the U.S. Department of the Interior in pursuit of national energy policies. The ESP was administered by the Bureau of Land Management from 1973 to 1982, then by the Minerals Management Service, and has been administered by BOEM since October 2011. The consistent mandate of the ESP since its inception has been to establish the information needed for assessment and management of potential impacts from oil and gas development on the OCS and coastal environments.

The ESP operates on a national scale to assist in predicting, projecting, assessing, and managing potential effects on the human, marine, and coastal environments of the OCS that may be affected by oil and gas development. Lease-management decisions are enhanced when current, pertinent, and timely information is available. Final reports from the ESP are most directly utilized by teams of NEPA analysts within the BOEM Environmental Analysis Sections when they prepare and/or review Environmental Impact Statements, Environmental Assessments, Exploration Permits, and Development and Production Plans. Of course, a wide range of arctic scientists, stakeholders, and decision-makers also make use of ESP products.

Doug DeMaster reviewed the process through which NMFS sets its research priorities. NOAA's budget and planning process is used for developing new initiatives through the federal budget process, as well as finalizing the NOAA budget portion of the annual President's budget request. Regarding the Arctic, the development and implementation of the NOAA budget closely adheres to the NOAA Arctic Vision and Strategy. In implementing the NOAA Arctic Vision and Strategy, it has been assumed that the Arctic (1) will continue to experience significant environmental change, (2) will become more accessible to human activities, and (3) will be the focus of increasing interest both nationally and globally. Based on these assumptions and assuming adequate funding in the future, NOAA has identified three priority activities concerning the Arctic: (1) sea ice forecasting, (2) monitoring the impacts of climate change in the high Arctic through the continuation and expansion of NOAA's Distributed Biological Observatory (DBO), and (3) actions needed to support the development of oil and gas resources in the high Arctic. In FY13, as federal appropriations allow, NOAA envisions making progress on all six of the priority objectives identified in the NOAA Arctic Vision and Strategy.

Part III: Enhancing Collaboration among BOEM/BSEE/NOAA

Dee Williams introduced an exercise to help clarify the scientific information needed by BOEM, BSEE, and NOAA in relation to oil and gas development on the arctic OCS. An "information matrix" would allow an objective approach to assessing the relative importance and availability of the various types of information needed by the agencies' decision-makers. Table 1 illustrates the basic concept of this approach: (1) the first column lists several "concepts" or specific topics of relevant information, and (2) the other columns provide cells in which the relative quality or amount of information on a particular topic is evaluated for different species (e.g., high, medium, low). The set of concepts or topics would be developed through discussions with regulatory analysts (e.g., NEPA, ESA) based on the types of information that they require to complete their assessments. The rankings for the quality or availability of information for each topic would be derived through discussions with scientific experts who are familiar with the current scientific literature. Workshop participants divided themselves into five breakout groups to discuss the utility of this approach. In general, participants agreed that this was a useful approach and was worth exploring further.

The breakout groups were also asked to suggest additional ways in which communication, coordination, and collaboration among BOEM, BSEE, and NOAA could be enhanced. To guide these discussions, the following trigger questions were posed to each of the breakout groups:

1. What are the most important current and future information needs for each agency, how do they differ, and how are they similar (focus on information needed to inform management decisions)?

2. What processes among NOAA, BOEM, and BSEE would be most effective to facilitate identifying the high priority information needs necessary to inform both agency management and agency regulatory decisions? How could we ensure that priorities are revisited and updated regularly and in a timely way?

3. What current partnerships should be strengthened and maintained? Do we need to improve interagency communication and collaboration with respect to scientific research? Do we need to improve our communications and collaborations with others (and to the public)? How could we do that?

4. How can we improve data delivery and sharing from projects of mutual interest?

5. How can we improve funding, logistics, and partnerships to support research of mutual interest?

6. As for information needs among NOAA, BOEM, and BSEE, where are they the same and where are they different, particularly when considering different time scales?

Table 1. Example of an "information matrix" illustrating the general concept of identifying and evaluating information needs. A small working group will consider this example and other ideas to develop a practical mechanism for assessing the availability of information necessary to support science-based decision-making. The example presented below is a preliminary draft created for the purpose of discussion. The "concepts" and qualitative ratings of information shown below are provided solely as examples (i.e., the ratings do not necessarily reflect the actual status of information). The concepts and ratings will be revised and refined by the working group.

Biological Resources

Concept	*Cetaceans* **Bowhead Whale**	*Pinnipeds* **Bearded Seal**	*Fish* **Arctic Cod**
Abundance Estimate	High	Ample	Ample
Population Status	High	Ample	Ample
Stock Structure	High	Ample	Ample
Life Cycle	Ample	Ample	Sparse
Distribution	Ample	High	Ample
Habitat Requirements	Ample	Ample	Ample
Forage	Ample	Ample	Ample
Sensitivity	Ample	Abundant	Sparse
Resilience	Ample	Ample	Sparse
Role in Ecosystem	Abundant	Abundant	Ample

Part IV: Identifying Next Steps and Action Items

Participants agreed that the workshop discussions had yielded many useful and practical ideas for NOAA, BOEM, and BSEE to work together effectively to accomplish mutual goals. It was recognized that several of these ideas would not only help to improve the already-strong partnerships that exist between BOEM and NOAA (e.g., NMFS collaboration through BOEM's Environmental Studies Program), but would also help to create new partnerships among all three agencies. To build on the workshop's positive momentum, the breakout groups were asked to propose specific action items in the Arctic that could be considered for implementation following the workshop. Ideas for potential action items proposed by workshop participants included the following. (Note that these potential actions are not necessarily mutually exclusive.)

1. Convene a workshop to review the regulatory information that would be required under various statutes (including quality of information, certainty of information).

2. Establish a working group to develop funding strategies, including elevating the profile of arctic issues through one interagency voice.

3. Task a working group with developing hypothetical case studies (realistic scenarios) to identify issues and opportunities associated with lease sales, spill response, etc.

4. Establish a working group to continue the development of the draft information matrices considered at this workshop and to clarify the information needed by NOAA and BOEM (phase 1 of this task would be intra-agency, and phase 2 would compare interagency results).

5. Develop an outreach/inreach strategy for communicating our missions and successes in the BOEM/NOAA collaboration.

6. Convene another face-to-face meeting regarding arctic issues among NOAA, BOEM, and BSEE (with about the same composition and size as the February 2012 meeting) in the autumn of 2012 (perhaps associated with the oil and gas forum?).

7. BOEM and NOAA should jointly explore possibilities for securing sufficient ship resources to support research projects of mutual interest.

8. Establish, define, or refine collaborations among NOAA, BOEM, and BSEE that could help to improve and/or inform the processes to identify priorities and secure adequate funding.

9. Conduct early planning and coordination for BOEM/BSEE NEPA documents at the regional level (with input from NOAA). NOAA has discipline-specific expertise that should be front-loaded into the process.

10. Continue and expand interactions and communication among agencies at local levels. Such face-to-face meetings are productive and should be utilized whenever feasible.

11. Improve top-down and interagency communication and coordination to establish research priorities at the national level via ICCOPR (Interagency Coordinating Committee on Oil Pollution Research) and to establish and defend budgets.

12. Develop a strategy for strengthening the availability of ships to support research in the high Arctic (may include joint cruises, shared resources, etc.).

13. Establish a working group concerning sea ice and finding ways to improve the quality of sea ice forecasting at various scales. The first step would be a briefing, followed by a working group to identify other issues.

14. Hold a workshop to evaluate how unmanned aerial systems (UAS) can be more fully utilized to support the priorities of NOAA, BOEM, and BSEE.

15. Establish a library of background documents that could be used in NEPA analyses, as well as documents that could be shared among NOAA, BOEM, and BSEE analysts.

Conclusions

Doug DeMaster and Jim Kendall summarized the high points of the workshop and gave their perspectives on some of the workshop's ideas that should be pursued as next steps.

1. *Information matrices*: A small working group, led by Dee Williams (BOEM) and John Bengtson (NOAA), will refine a more detailed example of the draft matrices that were introduced at the workshop. The information incorporated into the matrices will be compiled by consulting with regulatory analysts (e.g., NEPA, ESA, MMPA, NRDA [Natural Resource Damage Assessment]) and scientific experts.

2. *Case studies*: A small working group, led by Mary Baker (NOAA), Cathy Coon (BOEM), and Mike Routhier (BOEM), will develop realistic scenarios of hypothetical case studies concerning activities such as lease sales and spill response. These case studies will help to identify the information needs, opportunities, and challenges associated with energy development activities on the OCS in Alaska.

3. *ICCOPR coordination*: David Moore (BSEE) will seek ways to improve top-down and interagency communication and coordination at the national level via ICCOPR. He will lead efforts to represent the perspectives of BSEE, BOEM, and NOAA within ICCOPR regarding research priorities and budget requirements.

4. *Unmanned aerial systems (UAS)*: Arrangements will be made to schedule a briefing to the NOAA/BOEM/BSEE working group at its next meeting by UAS experts regarding the capabilities, availability, and feasibility of incorporating UAS support into studies conducted by the three agencies.

5. *Sea ice forecasting*: Steps will be taken to arrange a briefing to the NOAA/BOEM/BSEE working group by sea ice forecasting experts. The focus of the briefing will be the current status of sea ice forecasting and the need for improving the quality of sea ice forecasts. Following the briefing, a working group may be formed to identify additional sea ice issues that could benefit from interagency coordination.

6. *Outreach and inreach*: Jim Kendall (BOEM) and Doug DeMaster (NOAA) will work with their respective communications and public relations experts to identify areas of potential interagency synergy regarding both outreach to the public and inreach within NOAA and BOEM. In particular, agency leadership should leverage their public affairs resources to communicate how the vision of the NOAA/BOEM memorandum of understanding is being fulfilled.

7. *Workshop report*: A draft workshop report has been prepared by the workshop steering committee and circulated for comment to all participants. The final workshop report is published and distributed by Alaska Sea Grant (David Christie).

8. *Workshop presentations*: A web page has been established to provide access to PowerPoint presentations that were made available for distribution outside of the workshop. The online address for this site is included in the final report of the workshop. (http://seagrant.uaf.edu/conferences/2012/boem/)

9. *Future meetings*: It was agreed that in light of the constructive interactions during the February 2012 workshop, it would be useful for workshop participants to constitute themselves as the "NOAA/BOEM/BSEE Arctic Working Group" to continue their productive dialogue. The working group should remain focused on arctic issues of mutual interest, and it was agreed that the size and composition of the working group at the February workshop was very close to ideal. There was a consensus that the working group should aim to meet again soon—perhaps in autumn 2012.

In closing the workshop, Doug DeMaster and Jim Kendall expressed their thanks to the workshop co-chairs Jeep Rice and Cathy Coon, the steering committee, and David Christie for their efforts to organize and implement the workshop. They also expressed their appreciation to all of the workshop participants for the energy, ideas, and openness they brought to the discussions. All of these contributions resulted in what all participants agreed was a very productive and successful workshop. The workshop was a stimulating experience, and it was clear that the three agencies have more similarities in mission and objectives than they have differences. There was a strong sense among participants that there would be many benefits to continuing this dialogue in the future.

Workshop Steering Committee

Co-chairs: Jeep Rice (NOAA) and Cathy Coon (BOEM)
Facilitator: David Christie (University of Alaska Fairbanks) Director, Alaska Sea Grant

National Oceanic and Atmospheric Administration (NOAA)
Mary Baker, Regional Manager, Assessment Restoration Division, Office of Restoration and Response, NOS
John Bengtson, Director, National Marine Mammal Laboratory, Alaska Fisheries Science Center, NMFS
Steve Davis, Oil and Gas Coordinator, Alaska Regional Office, NMFS
Ed Farley, Program Manager, Ecosystem Monitoring and Assessment Program, Alaska Fisheries Science Center, NMFS
William Hines, Arctic Coordinator, Alaska Regional Office, NMFS
Amy Holman, Alaska Regional Coordination Team Coordinator, NOS
Stanley (Jeep) Rice, Program Manager, Habitat Assessment, Alaska Fisheries Science Center, NMFS

Bureau of Ocean Energy Management (BOEM)
Cathy Coon, Marine Biologist, Environment Studies and Management Section, Alaska OCS Region
Sharon Warren, Regional Supervisor, Environment, Alaska OCS Region
Dee Williams, Chief, Environmental Studies and Management Section, Alaska OCS Region

Bureau of Safety and Environmental Enforcement (BSEE)
David Moore, Oil Spill Response Supervisor, Washington, D.C.
Jim Lusher, Engineer, Alaska Region

Appendix 1: Memorandum of Understanding between BOEMRE and NOAA

Memorandum of Understanding on Coordination and Collaboration Regarding Outer Continental Shelf Energy Development and Environmental Stewardship

between the
U.S. Department of the Interior and U.S. Department of Commerce

May 19, 2011

A. PURPOSE: This Memorandum of Understanding (MOU) establishes an agreement between the Department of the Interior (DOI), Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) and the Department of Commerce (DOC), National Oceanic and Atmospheric Administration (NOAA). The intent of this document is to establish a formal and lasting agreement between BOEMRE and NOAA regarding coordination and collaboration between the agencies to ensure that decision-making relating to the development of outer continental shelf (OCS) energy resources is based on the relevant scientific information and expertise of both agencies in order to fulfill the stewardship and conservation of living marine resources and ecosystems responsibilities that fall under the agencies' respective authorities.

This MOU describes how BOEMRE and NOAA will cooperate and coordinate, including at the early stages in certain OCS energy-related processes, by:

1. Defining specific processes to ensure effective and timely communication of agency priorities and upcoming activities;
2. Identifying and undertaking critical environmental studies and analyses, including the sharing of information, and making specific scientific efforts to significantly improve products and demonstrate efficient governance and sound stewardship of the Nation's marine ecosystems, resources, and coastal communities[1];
3. Collaborating on scientific, environmental, and technical issues related to the development and deployment of environmentally sound and sustainable offshore wind and marine and hydrokinetic (MHK) renewable energy technologies; and
4. Increasing coordination and collaboration on public announcements related to OCS activities, including with respect to research and scientific priorities.

[1] The agencies recognize there is a need to collaborate on environmental review documents to permit the adoption of analyses that support each agency's permitting responsibilities, including, for example, the adoption of Environmental Impact Statements or Environmental Assessments to the maximum extent possible.

B. AUTHORITIES: The DOI and DOC authorities relevant to this agreement include but are not limited to:

1. Outer Continental Shelf Lands Act (OCSLA), 43 U.S.C. §§ 1331 *et seq.;*
2. National Marine Sanctuaries Act (NMSA) 16 U.S.C. §§ 1431 *et seq.*;
3. Magnuson-Stevens Fishery Conservation and Management Act (MSA), 16 U.S.C. §§ 1801 *et seq.*;
4. The Marine Mammal Protection Act (MMPA), 16 U.S.C. §§ 1361 *et seq.*;
5. Coastal Zone Management Act (CZMA), 16 U.S.C. §§ 1451 *et seq* ;
6. Integrated Coastal and Ocean Observing Systems Act (ICOOS), 33 U.S.C. §§ 3601 *et seq*;
7. The Endangered Species Act (ESA), 16 U.S.C. §§ 1531 *et seq.*;
8. The Oil Pollution Act (OPA), 33 U.S.C. §§2701 *et seq.*;
9. The National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321-4347;
10. Executive Order 13547 (July 19, 2010) -- Stewardship of the Ocean, Our Coasts, and the Great Lakes;
11. The Coast and Geodetic Survey Act, 33 U.S.C. §§883a *et seq*; and
12. The National Weather Service Organic Act, 15 U.S.C. §313.

This MOU does not modify existing agency authorities and does not reduce, expand, or transfer any of the statutory or regulatory authorities and responsibilities of the signatory agencies.

C. BACKGROUND: Stewardship of the marine and coastal environment is mandated by OCSLA, NEPA, and other related Federal environmental and socioeconomic laws (including, for example, ESA, CAA, Executive Order 12898). DOI's mission, as the manager of energy-related activities on OCS Federal lands, includes ensuring that OCS resources are made available for development in a timely and efficient manner while protecting the environment and ensuring that those offshore energy and mineral resources are developed safely. DOI must also ensure that leases, easements, and rights of way for energy and marine minerals-related purposes, including the development of renewable energy, are issued and overseen in a manner that, among other things, affords environmental protection and involves appropriate consultation with relevant Federal agencies. Further, DOI funds ocean research through the Environmental Studies Program to provide scientific information in support of policy and management decisions.

NOAA's mission is to understand and predict changes in Earth's environment and conserve and manage coastal and marine resources to meet our Nation's economic, social, and environmental needs. NOAA is responsible for a variety of activities in marine and coastal ecosystems as mandated by several statutes and authorities. These activities include managing protected species, managing commercial and recreational fisheries, protecting marine and coastal habitats, managing development of the coastal zone, and designating and protecting marine areas of special significance due to their conservation, recreational, ecological, historical, scientific, cultural, archeological, educational, or aesthetic qualities. These activities are conducted pursuant to the

ESA, CZMA, MMPA, MSA, NMSA and other relevant statutes and involve appropriate consultation with relevant Federal agencies.

In addition, Executive Order 13547 on Stewardship of the Ocean, Our Coasts, and the Great Lakes that established our National Ocean Policy (NOP) further highlights the need for close and regular coordination and collaboration between Federal agencies regarding oversight of Federal waters and addresses a number of priority objectives that directly relate to the issues and work outlined in this MOU. The NOP emphasizes, among other things: the use of the best available science and knowledge to inform decisions affecting the ocean, our coasts, and the Great Lakes; the enhancement of our capacity to understand, respond to, and adapt to a changing global environment; and support for sustainable, safe, secure, and productive access to and uses of the ocean, our coasts, and the Great Lakes. Further, the Final Recommendations of the Interagency Ocean Policy Task Force call for the use of Coastal and Marine Spatial Planning (CMSP) as a key element for implementing those elements of the National Ocean Policy.

D. RESPONSIBILITIES AND PROCEDURES:

1. General Provisions

i. Where BOEMRE and NOAA are considering the potential effects of oil and gas and renewable energy-related activities under their respective authorities, the agencies agree to work cooperatively with each other and relevant private parties to ensure awareness of each agency's statutory and regulatory timeframes and requirements, and to provide sufficient information to the other agency to inform their decision-making processes within those timeframes. It will remain the responsibility of parties seeking to conduct activities on the OCS to manage their projects in compliance with BOEMRE's and NOAA's statutory and regulatory requirements.

ii. BOEMRE and NOAA will keep each other apprised of the status of their regulatory processes and respective reviews to ensure that both agencies are provided any information needed to support their decision making processes and determinations.

iii. BOEMRE and NOAA will develop potential ways to appropriately align their regulatory and decision making processes and endeavor, where appropriate, to create consistent procedures for monitoring and mitigation measures.

iv. BOEMRE and NOAA will meet regularly to identify the best available science to support future regulatory decisions and to identify any additional studies that may be relevant to informing the agencies' decision making processes.

v. BOEMRE and NOAA will engage early in their respective processes in order to improve coordination and to identify issues that should be raised at critical stages, such as, for example, prior to solicitation of public comments or issuance of a Request for Information. Specifically, BOEMRE and

NOAA will advise each other of matters of particular interest or concern, which will help guide collaboration between the agencies through the stages and processes described below, and allow, as appropriate, for each agency to rely on or incorporate the other's NEPA documents.

2. **NOAA involvement in BOEMRE OCS energy-related programs and environmental analyses.**

i. **OCSLA process.** NOAA may designate an official to be involved in and coordinate with BOEMRE in connection with the development of the relevant program documents and other information to support the decision-making process related to the oversight of offshore oil and gas activities at the following stages.

- **5-Year Oil and Gas Leasing Program and Lease Sale stages.** As coordinated with an official to be designated by NOAA, BOEMRE and NOAA will communicate early in the 5 year planning and lease sale processes, including at least 2 weeks prior to solicitation of comments and to identify issues that should be raised in Requests for Information or Interest. NOAA will submit written comments in connection with the Requests for Information as BOEMRE develops options for a new 5-Year Oil and Gas Leasing Program. Specifically, NOAA will state all areas of particular interest or concern to help guide collaboration between the agencies through the stages and processes described below.
- **Relative Environmental Sensitivity Analysis.** As coordinated by an official to be designated by NOAA, NOAA will participate in the development of environmental sensitivity analyses.
- **Geological and Geophysical (G&G) Permits, Exploration Plans (EP) and Development and Production Plans (DPP), and Development Operations Coordination Documents (DOCD).** Through an official to be designated by NOAA, upon receipt of a G&G permit application, EP, DPP, or DOCD, BOEMRE will notify NOAA of the submission of the material and, if requested by NOAA, transmit the material to NOAA and schedule a meeting for the purpose of discussing the material. As part of this meeting, BOEMRE and NOAA personnel will identify any areas of concern raised by the material and discuss each agency's regulatory process and timelines. BOEMRE will notify NOAA of any EP, DPP, or DOCD that might be subject to a Categorical Exclusion Review, and NOAA will have the opportunity to review and comment on the EP, DPP, or DOCD within a reasonable timeframe that is consistent with BOEMRE's statutory and regulatory responsibilities and timelines.

ii. **NEPA analyses.** BOEMRE will be the lead agency with respect to any NEPA analysis related to offshore activity within BOEMRE's jurisdiction or authority. With regard to EISs and EAs for which BOEMRE is the lead agency, BOEMRE will invite NOAA to be a cooperating agency on the

development of the EIS or EA to support BOEMRE's decision-making. If NOAA elects to participate as a cooperating agency, BOEMRE will retain decision-making responsibility for direction and oversight of the EIS or EA, and BOEMRE will consult with and involve participating NOAA personnel in contractor selection, methodology evaluation, scoping, development of alternatives, drafting, and review of draft and final products, as appropriate and consistent with BOEMRE's statutory and regulatory responsibilities and timelines.

iii. **Renewable energy or alternate use activities.**

- Intergovernmental Task Forces: BOEMRE will invite NOAA to participate in any current and future Intergovernmental Task Forces or other intergovernmental vehicles and initiatives established to consult and coordinate on renewable or alternative energy or alternate use activities (including, for example, Smart from the Start). NOAA will provide appropriate personnel to participate in these consultation and coordination efforts, and provide data and information to support these efforts, consistent with their purpose and the directives of Executive Order 13547.
- Environmental review: As the lead agency, BOEMRE will invite NOAA to participate in the development and review of its EISs or EAs related to renewable energy projects and alternate use of OCS facilities for energy-related or other marine-related purposes, as authorized by sections 8(p)(1)(C) and (D) of OCSLA, as amended. BOEMRE procedures for authorizing renewable energy and alternate use activities are set forth in regulation at 30 CFR 285.
- BOEMRE will consult with and involve participating NOAA experts in methodology evaluation, scoping, development of alternatives, drafting, and review of draft and final products, as appropriate and consistent with BOEMRE's statutory and regulatory responsibilities and timelines.
- BOEMRE will provide NOAA with the necessary information to inform and facilitate NOAA's participation as a cooperating agency in environmental reviews.
- BOEMRE and NOAA shall coordinate, as appropriate under the terms of this agreement, on the agreement between DOI and DOE on the coordinated deployment of Offshore Wind/MHK technologies, and on the agreement between NOAA and DOE on Weather-dependent and Oceanic Renewable Energy Resources in order to promote tri-agency collaboration and to eliminate duplication of effort on offshore wind energy and MHK technology development. The Interagency Working Group on Resource Assessment and Design Conditions may be utilized to support this objective.

iv. **Responses.** For all activities described in Section D.2, NOAA agrees to respond within a mutually-agreeable timeframe. If NOAA does not provide comments within the agreed-upon timeframe, then BOEMRE may record that NOAA has identified no significant issues or has provided "no

comment." Where activities in Section D.2 that are linked to mandated statutory or regulatory timeframes (for example, ESA consultations and MMPA permitting), NOAA will respond within these timeframes or within a timeframe agreed upon between NOAA and BOEMRE. In addition:

- Within 10 working days of receipt of the invitation to participate, NOAA will notify BOEMRE of its decision to accept or decline and assume the roles and responsibilities described above.
- NOAA may notify BOEMRE that it intends to respond outside the determined timeframe and provide draft comments for consideration, or request a one-time, 5 working day extension of the comment deadline.
- BOEMRE will, as appropriate, accept NOAA's comments on activities described in Section D.2 (e.g., development of draft or final NEPA documents or relative environmental sensitivity analysis). BOEMRE will document and explain in writing any decision not to incorporate a comment by NOAA and NOAA will have an opportunity to respond, if possible, prior to the finalization of the relevant document.

3. **BOEMRE involvement in NOAA OCS energy-related environmental analyses.** NOAA will invite BOEMRE to be a cooperating agency for any matter that NOAA has under its jurisdiction relating to OCS energy development. NOAA will be the lead agency on such matters. The roles of each agency are described below for each document.

i. **NEPA Analyses.** As lead agency, NOAA will invite BOEMRE to be a cooperating agency on the development of relevant NEPA analyses to support NOAA's decisions that could relate to OCS energy activities. If BOEMRE elects to participate as a cooperating agency, NOAA will retain decision-making responsibility for direction and oversight of the EIS or EA, but will consult with and involve participating BOEMRE personnel in group/contractor selection, methodology evaluation, scoping, development of alternatives, drafting, and review of draft and final products, as appropriate and consistent with NOAA's statutory and regulatory responsibilities and timelines.

ii. **Responses.** For all activities described in Section D.3, BOEMRE agrees to respond within a mutually-agreeable timeframe. If BOEMRE does not provide comments within the agreed-upon timeframe, then NOAA may record that BOEMRE has identified no significant issues or has provided "no comment." Where activities in Section D.3 are linked to mandated statutory or regulatory timeframes (for example, ESA consultations and MMPA permitting), BOEMRE will respond within these timeframes or within a timeframe agreed upon between BOEMRE and NOAA.

- Within 10 working days of receipt of the invitation to participate, BOEMRE will notify NOAA of its decision to accept or decline the invitation to participate and assume the roles and responsibilities described above.

- BOEMRE may notify NOAA that it intends to respond outside the determined timeframe and provide draft comments for consideration, or request a one-time, 5 working day extension of the comment deadline.
- NOAA will, as appropriate, accept BOEMRE's comments on activities described in Section D.3 (including, for example, development of EAs or draft and final EISs). NOAA will document and explain in writing any decision not to incorporate a comment by BOEMRE, and BOEMRE will have an opportunity to respond, if possible, prior to the finalization of the document.

4. **Environmental studies and scientific collaboration.** BOEMRE has partnered with Federal scientists from NOAA throughout the history of the offshore energy program. BOEMRE and NOAA have had many significant and successful partnerships related to scientific research and studies projects, including those conducted under the auspices of the National Oceanographic Partnership Program. These partnerships have resulted in the achievement of the agencies' research objectives with a substantial cost savings to each agency. OCSLA requires, to the maximum extent practicable, DOI to enter into appropriate arrangements to utilize on a reimbursable basis the capabilities of the Department of Commerce for Outer Continental Shelf environmental studies.[2]

   i. To support and promote the environmental studies partnership, BOEMRE will:
      - Invite NOAA to be an ex officio member of its OCS Scientific Committee and to participate in the Committee's meetings;
      - Consider NOAA's official comments on the draft National Studies List (NSL), presented at the OCS Scientific committee meetings, and discussions of potential joint priority research areas, when prioritizing studies for the current fiscal year; and
      - Identify and discuss upcoming studies that NOAA could perform for BOEMRE, or where inter-agency collaboration is warranted.

   ii. To support and promote the environmental studies partnership, NOAA will:
      - Invite BOEMRE, as appropriate, to be a member of any NOAA Scientific Advisory Board Working Groups related to OCS activities or marine minerals;
      - Provide the information necessary to establish mutually agreeable timelines for meeting both agencies' statutory requirements and the timely completion of environmental studies;
      - Provide historical and current scientific data for ongoing and planned studies and other information to assist in planning and decision-making relating to ongoing or future environmental studies; and
      - Notify BOEMRE on an annual basis of the availability of NOAA scientists to assist in the planning process for the conduct of environmental studies outlined above.

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[2] 43 U.S.C. § 1346(f).

iii. To support and promote scientific collaboration, BOEMRE and NOAA will:
- Where feasible, provide funding assistance and, where possible, participate in scientific projects and environmental studies outlined in any future reimbursable service agreements under this umbrella MOU; and
- Notify each other of planned scientific projects or studies relevant to OCS or related activities to see if there is potential for collaboration or coordination (including, for example, undersea transmission line research).

5. **Quarterly leadership meetings.** BOEMRE and NOAA senior leadership will meet on a quarterly basis to discuss topics relevant to OCS energy and marine mineral development and this MOU. These meetings will alternate between BOEMRE and NOAA headquarters offices. Specifically, the purpose of these meetings will be to, among other things:

i. Discuss any issues arising under this MOU;
ii. Discuss emerging issues and facilitate resolution of any issues related to cooperation and coordination among the agencies on matters related to OCS energy development and oversight;
iii. Make both agencies aware of relevant upcoming programmatic and policy decisions;
iv. On at least an annual basis evaluate the implementation of this agreement and activity and progress related to National Ocean Policy objectives, including in particular CMSP; and
v. Discuss coordination and cooperation with regard to oil spill research and preparedness.

6. **Offshore Safety and Oil Spill Response.** NOAA has responsibilities related to the response to and restoration following oil spills in coastal and marine environments. Under the National Contingency Plan, NOAA is required to provide "expertise in environmental chemistry, oil slick tracking, pollutant transport modeling, natural resources at risk, environmental tradeoffs of countermeasures and cleanup, and information management." To fulfill this requirement, NOAA has established and maintains a scientific support team with considerable expertise and experience in all these areas of environmental response and restoration.

BOEMRE requires that every OCS operator prepare and submit for approval an Oil Spill Response Plan (OSRP) for each of its offshore facilities. These OSRPs must describe in detail the actions that an operator's spill management team will take should an oil spill occur. Included in the response plan is a "worst case" discharge response scenario, as well as contingency plans for less severe spills or emergencies. As part of the BOEMRE review of this document, BOEMRE verifies, among other things, that the operator has a contract with an approved Oil-Spill Removal Organization that is capable of providing qualified personnel and sufficient equipment to respond to their worst case discharge spill volume.

i. **Ocean Energy Safety Advisory Committee (OESC).** BOEMRE's Ocean Energy Safety Advisory Committee provides a forum for representatives from industry, government, non-governmental organizations, national laboratories, and the academic community to exchange information and ideas, share best practices, and develop cross-organizational expertise. The OESC will facilitate the identification, prioritization and definition of research and development projects in the areas of drilling and workplace safety, containment, and oil spill response.

- NOAA has and will continue to designate a representative to serve on the OESC.
- In addition to participating in the OESC, BOEMRE and NOAA will participate, along with other relevant parties, in an oil spill response working group or other technical working groups, as appropriate, to develop recommendations, hold workshops and focus on issues relating to improved skimming and shoreline protection equipment, as well as other advancements in oil spill cleanup and response technologies.

ii. **Oil Spill Response Plans**.

- BOEMRE will notify NOAA upon receipt of an operator OSRP. Upon request by NOAA, BOEMRE will provide NOAA a meaningful opportunity to review operator OSRPs to ensure that they adequately address living marine resources issues.

iii. **Oil Spill Exercises.**

- BOEMRE will notify NOAA of all unannounced oil spill drills conducted in the Gulf, Pacific, and Alaska OCS Regions and coordinate the participation of designated NOAA personnel in the drills.
- When possible, designated NOAA personnel will participate in BOEMRE unannounced drills and provide input into evaluation of the performance of the operator.

7. **Announcements.** NOAA and BOEMRE will work to coordinate all press releases, published advertisements, or other statements intended for the public that relate to OCS activities covered by this MOU where inter-agency collaboration was utilized to develop or complete the document or activity detailed in the announcement.

8. **BOEMRE Reorganization.** Upon the completion of BOEMRE's reorganization process, all responsibilities and processes outlined in this document will remain in effect and be immediately transferred to the relevant new agency (Bureau of Ocean Energy Management (BOEM), or Bureau of Safety and Environmental Enforcement (BSEE)), until such time as this agreement can be officially updated to reflect the new organizational structure within DOI.

E. **PERIOD OF PERFORMANCE:** This MOU shall be in effect for five (5) years from the date it is signed. It shall be reviewed three (3) years after it goes into effect at a quarterly leadership meeting. Should both parties agree to extend this agreement,

the MOU will remain in effect for a further period of five (5) years, or a period determined by that review.

F. FUNDING:

1. Where appropriate, BOEMRE and NOAA will enter into project-specific reimbursable service agreements (RSAs) that will describe the specific services to be provided by DOI or DOC to the other agency. Each RSA will also describe in detail how costs will be apportioned between the Departments, and will establish a mechanism for reimbursement of such expenses.

2. Nothing in this agreement should be construed to obligate agency funds, property, or services. Nor does this agreement commit either agency to enter into any contract or binding obligation, or to spend funds on any particular project or purpose.

G. CONTACTS: The list of contacts below is designed to identify specifically the respective agency personnel responsible for implementing the various provisions of the MOU.

Topic	BOEMRE	NOAA
Quarterly leadership meetings	• Deputy Director, BOEMRE • Chief of Staff, BOEMRE • Chief of Staff, Offshore Energy and Minerals Management (OEMM)	• Principal Deputy Under Secretary, NOAA • Chief of Staff, NOAA • Director of Policy, NOAA • Assistant Administrators for NMFS and NOS
National environmental analyses	• Chief, Environmental Division • Chief, Environmental Assessment Branch • Chief, Renewable Energy (As appropriate) • Chief of Staff, OEMM	• Chief Scientist, NOAA • Chief Scientist, NOAA/NMFS • Director of Office of Response and Restoration, NOAA/NOS • Director of Office of Protected Resources, NOAA
Studies and science	• Chief, Environmental Division • Chief, Environmental Sciences Branch • Chief of Staff, OEMM	• Chief Scientist, NOAA • Chief Scientist, NOAA/NMFS • Director of Office of Response and Restoration, NOAA/NOS • Director of Office of Protected Resources, NOAA • Director, Office of Science and Technology, NOAA/NWS • Director, Earth Systems Research Laboratory, NOAA/OAR

Regional environmental analysis	• Chief, Environmental Division • Chief, Environmental Assessment Branch • Appropriate Deputy Regional Director • Appropriate Regional Supervisor, Leasing and Environment • Chief, Appropriate Regional Environmental Assessment Section (or equivalent) • Chief, Renewable Energy (As appropriate) • Chief of Staff, OEMM	• Appropriate Regional Administrator, NMFS • Appropriate Regional Science Center Director, NMFS • Appropriate Regional Director of Office of Response and Restoration, NOAA/NOS • Appropriate Assistant Regional Administrators for Protected Resources and Habitat Conservation, NMFS
Announcements	• Primary contact for applicable project/issue • Chief, Public Affairs	• Primary contact for applicable project/issue • Director, Office of Communications and Public Affairs

H. MODIFICATIONS, INTERPRETATIONS, AND TERMINATIONS: Changes and/or modifications to the agreement may be made at any time upon mutual written consent of the parties. No oral statement by any person, and no written statement by anyone other than the undersigned, or an authorized representative as designated in writing, shall be interpreted as modifying or otherwise affecting the terms of this agreement by both parties.

Either party may terminate this agreement with thirty (30) calendar days advance written notice.

I. RESOLUTION OF DISAGREEMENTS: BOEMRE and NOAA will consult with one another to resolve issues at staff levels and elevate disputes through the respective organizational levels only if necessary. Notification of potential areas of disagreement by either agency should be in writing. If there is no resolution at this level, either agency may elevate the issue to the appropriate officials within each agency or Department.

J. SIGNATURES

Michael R. Bromwich
Director
Bureau of Ocean Energy Management,
Regulation and Enforcement
U.S. Department of the Interior

Jane Lubchenco, Ph.D.
Under Secretary of Commerce for
Oceans and Atmosphere
U.S. Department of Commerce

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

February 6, 2012

James Kendall, Ph.D.
Regional Director
Bureau of Ocean Energy Management
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

Mark Fesmire
Regional Director
Bureau of Safety and Environmental Enforcement
3801 Centerpoint Drive, Suite 500
Anchorage, Alaska 99503

Dear Dr. Kendall and Mr. Fesmire:

Staff from our respective agencies have worked together in recent months to develop Alaska regional operating procedures to guide coordination regarding environmental analyses and consultations for Outer Continental Shelf oil and gas activities. The procedures discuss issues such as holding regular coordination meetings, sharing information on the schedule for future oil and gas activities and analyses, and providing opportunities for early reviews of draft analyses. Our staffs have agreed on the enclosed version of these regional operating procedures.

The National Marine Fisheries Service fully supports these regional operating procedures and looks forward to working with the Bureau of Ocean Energy Management and Bureau of Safety and Environmental Enforcement via this framework. If you concur, please respond accordingly on behalf of your agencies.

Sincerely,

Robert O. Mecum

for James W. Balsiger, Ph.D.
Administrator, Alaska Region

Enclosure

Alaska Regional Operating Procedures
Between NOAA's National Marine Fisheries Service (NMFS)
and the
Bureau of Ocean Energy Management (BOEM)
and the
Bureau of Safety & Environmental Enforcement (BSEE)
Pursuant to the NOAA-BOEMRE Memorandum of Understanding dated May 19, 2011

February 6, 2012

Regular Coordination Meetings

Alaska staff from NMFS, BOEM and BSEE will hold regular and routine meetings on a quarterly basis or more often as requested by any one agency. The purposes of these meetings are as follows:

1. Share information regarding upcoming actions such as National Environmental Policy Act (NEPA) analyses, Endangered Species Act consultations, Essential Fish Habitat consultations, and the development of Annual Studies Plans.
2. Discuss the effectiveness of lease stipulations, monitoring of offshore oil and gas activities, oil spill risk analysis, oil spill response plans, notices to lessees, and other conditions of approval for Outer Continental Shelf (OCS) activities as they pertain to marine mammals, fish, and their habitats.
3. Provide updates on science planning, research priorities, and collaboration related to environmental studies.

Schedule for OCS Oil & Gas Activities

BOEM will maintain a project schedule on its website that lists future offshore oil and gas activities in the Alaska OCS including leasing, exploration, development, and anticipated NEPA documents that may require NMFS review. The project schedule will be updated monthly.

Exploration Plans

BOEM will provide NMFS a copy of all exploration plans for exploratory drilling immediately after they are deemed submitted under the Outer Continental Shelf Lands Act (OCSLA). BOEM will notify NMFS Alaska Region staff by email on the day that BOEM deems the exploration plan complete; will provide NMFS immediate access to an electronic copy of the exploration plan if hard copies cannot be delivered to NMFS on the same day; and will advise NMFS when to expect to receive a draft Environmental Assessment (EA) for review.

Cooperating Agency Requests

All BOEM and BSEE requests for NOAA to be a cooperating agency under NEPA on Alaska projects shall be addressed to the NMFS Regional Administrator. NMFS will coordinate with other NOAA offices and BOEM and BSEE will receive a consolidated NOAA response from NMFS for each request. When NOAA accepts an offer to be a cooperating agency, NOAA's response will clarify what level of cooperation NOAA can provide (e.g., reviewing drafts but not preparing analyses).

NMFS Review of BOEM & BSEE NEPA Documents

BOEM and BSEE will provide NMFS an opportunity to review drafts of all NEPA documents BOEM and/or BSEE prepares for Alaska OCS oil and gas activities. NMFS will strive to provide substantive comments, but may not always be able to do so due to staffing constraints. BOEM and BSEE will provide such documents to the Regional Administrator for the NMFS Alaska Region, who will assign them to appropriate staff. Generally, NMFS will have at least 14 working days for review except for those involving exploration activities, which are limited by the OCSLA to a 30-day environmental review. For exploration plans, BOEM will provide at least 4 working days for NMFS review of the EA, recognizing that the very short time available under OCSLA may preclude NMFS from providing substantive comments. For all NEPA documents, BOEM and BSEE will provide drafts that are reasonably complete and have been subjected to an internal review.

BOEM & BSEE Review of NMFS NEPA Documents

NMFS will provide BOEM and BSEE an opportunity to review drafts of all NEPA documents NMFS prepares for Incidental Harassment Authorizations and Letters of Authorization under the Marine Mammal Protection Act for Alaska OCS oil and gas activities that require BOEM and BSEE approval/regulatory oversight. NMFS's Office of Protected Resources will provide such NEPA documents to the BOEM and BSEE Alaska Regional Directors for assignment to appropriate staff. NMFS will provide drafts that are reasonably complete and have been subjected to an internal review. BOEM and BSEE will strive to provide substantive comments, but may not always be able to do so due to staffing constraints.

For all EISs and those EAs that are not being released for public comment, NMFS will generally provide at least 14 working days for review. For EAs that will be released for public comment, NMFS will provide at least 4 working days for BOEM and BSEE review of the draft EA. BOEM and BSEE may also provide comments to NMFS during NEPA public comment periods.

Essential Fish Habitat (EFH) Consultations

BOEM and NMFS will pursue programmatic EFH consultation for the Chukchi, Beaufort, and possibly the Cook Inlet Planning Areas, which should cover all of BOEM's actions and decrease the number of individual actions requiring separate EFH consultations.

Endangered Species Act Consultations

NMFS, BOEM and BSEE will continue to coordinate ESA consultations through technical assistance, informal consultation, formal consultation, and conference, as necessary. NMFS will provide BOEM and BSEE an opportunity to review draft Biological Opinions prior to signature. Whenever feasible, NMFS will provide BOEM and BSEE early notification of anticipated jeopardy/adverse modification determinations and will coordinate on the development of any proposed Reasonable and Prudent Alternatives.

Information Transfer

BOEM will continue to use gatherings such as the annual Alaska Marine Science Symposium to serve the purpose of the former Minerals Management Service "information transfer meetings" and will alert NMFS regarding the sessions where papers are being presented on BOEM funded studies.

Scientific Collaboration

BOEM and NMFS will continue to coordinate regarding data needs and research priorities related to the effects of OCS development on marine mammals, fish, and their habitats. BOEM and NMFS will establish interagency protocols to facilitate identifying information needs, setting research priorities, collaborating on scientific studies of mutual interest, and exchanging scientific information. These steps will help to enhance coordination between the two agencies relative to BOEM's Environmental Studies Program as well as regulatory/management activities for which BOEM, BSEE, and NMFS are responsible.

Appendix 3: Workshop prospectus

WORKSHOP TO BETTER COORDINATE INTERAGENCY PRIORITIES RELATED TO ARCTIC ENERGY ACTIVITIES ON THE OUTER CONTINENTAL SHELF

INTRODUCTION

The Arctic region is one of the last frontiers on Earth. Despite the Arctic being considerably less developed than other U.S. maritime areas; access to the region is increasing rapidly due to loss of sea ice, the demand for non-renewable and renewable resources, capital investments, and advances in technology. Development and transportation in the Arctic will bring many challenges and increased risk to the region; new infrastructure and sustained investment will be needed to ensure the Arctic ecosystem is protected and managed sustainably. Understanding and minimizing risks in the Arctic will require improved coordination within the federal government and with the State of Alaska and tribal, regional, and local governments.

The purpose of this workshop is to understand the mission of our two agencies, increase communication, and explore process pathways to further collaborate, with the overall goal of minimizing risk to the Arctic environment in the event that the development of energy and mineral resources of the OCS move forward. This is a beginning of a process that will be expanded to other agencies, State of Alaska, and tribal, regional, and local governments.

CONCEPT

The focus of the proposed workshop is to collaborate on enhancing communication and work processes across agencies.

On May 19, 2011, a Memorandum of Understanding (MOU) was signed between the Department of the Interior (DOI), Bureau of Ocean Energy Management (BOEM) and the Department of Commerce (DOC), National Oceanic and Atmospheric Administration (NOAA). The intent of the MOU is to improve coordination and collaboration between BOEM and NOAA to ensure environmentally sound development of outer continental shelf (OCS) energy and mineral resources while maintaining stewardship and conservation of living marine resources and ecosystems under each respective authority. Dovetailing off of this umbrella agreement, the Alaska Regional components of NOAA and BOEM subsequently developed an agreement specifically focused on their respective responsibilities in the Arctic**.**

Building on the BOEM and NOAA relationship/example, goals of this workshop include:

1. Refining processes for ensuring the timely identification and communication of the research priorities of other federal and state agencies supporting U.S. Arctic research;

2. Identifying a process for articulating the end users of such research, and the requisite timelines thereof to ensure products are more fully utilized in the decision-making processes.
3. Identifying potential areas for the improvement, and documentation thereof, regarding the use of science in the governance and stewardship of our nation's Arctic marine ecosystems, resources management, and cultural values.
4. Increasing coordination and collaboration on public announcements related to OCS research, scientific priorities, and related activities in the U.S. Arctic.
5. Increasing coordination and methodology for more efficient means of commenting on NEPA analysis between BOEM / NOAA.
6. Discuss a strategy on how to engage other agencies, State of Alaska, and Tribal, regional, and local governments in research, coordination, and synthesis efforts

Overall Vision of the Workshop

Improve effectiveness in the collaboration and coordination of research planning by agency missions; enhancing communication on coordinating comments on NEPA analysis; enhancing knowledge of and oil spill risk assessment and response strategies across agencies as related to energy development in the U.S. Arctic OCS.

VENUE AND TIMELINE

The workshop will be in Anchorage, Alaska, at the Captain Cook Hotel, February 23-24, 2012.

SCOPE

It is estimated that 20 Federal participants would attend from NOAA and similar number from BOEM/BSEE. Each agency will pay for federal employees' costs, respective of their agency. The University of Alaska Marine Advisory Program has been contracted to help organize and facilitate the workshop.

STEERING COMMITTEE

Co-Chairs - Jeep Rice (NOAA) and Cathy Coon (BOEM)

Facilitator - David Christie (Alaska SeaGrant, UAF), Director, Alaska SeaGrant Program

NOAA

Mary Baker (ORR/NOS/NOAA), Regional Manager, Assessment Restoration Division

John Bengtson (AFSC/NMFS/NOAA), Director, National Marine Mammal Laboratory

Steve Davis (AKR/NMFS/NOAA), Oil and Gas Coordinator

Ed Farley (AFSC/NMFS/NOAA), Program Manager BASIS/SECM

William Hines (AKR/NMFS/NOAA), Arctic Coordinator

Amy Holman (NOS/NOAA), Alaska Regional Coordination Team Coordinator

Stanley (Jeep) Rice (AFSC/NMFS/NOAA), Program Manager, Habitat Assessment

BOEM

Cathy Coon (BOEM), Marine Biologist

Sharon Warren (BOEM), Regional Supervisor, Environment

Dee Williams (BOEM), Chief, Environmental Studies

Bureau of Safety and Environmental Enforcement

Christy Bohl (BSEE), Oil Spill Program Analyst, Alaska Region

Jim Lusher (BSEE), Engineer

Appendix 4: Workshop agenda

Workshop to Implement the MOU between BOEM and NOAA
NOAA/BOEM/BSEE
February 23-24, 2012
Captain Cook Hotel, Anchorage, Alaska

AGENDA

The purpose of the workshop is to enhance collaborative opportunities, process, and products among BOEM/BSEE/NOAA in support of scientific decision-making related to arctic energy activities on the outer continental shelf.

February 23, 2012

8:00 am	Assemble
8:25 am	Call to order - *Jeep Rice, Cathy Coon*
8:30 am	Welcome and context of the meeting - *Doug DeMaster, Jim Kendall*
8:45 am	Purpose of the workshop; Overview of MOU between BOEM/NOAA - *Doug DeMaster, Bill Hines*
9:00 am	Drivers, goals, timelines; Concepts to keep in mind as we progress through agency mission and information needs; Meeting structure and how we will proceed from here - *Jeep Rice*

Part I. Understanding Agency Organization and Missions

9:10-9:50 am — Understanding BOEM; Organization and mission as it relates to the Arctic - *Sharon Warren*

- Approval of energy activities and environmental monitoring.
- NEPA process (cooperating agency).
- Consultations: (ESA, MMPA, EFH [Essential Fish Habitat]).
- Environmental studies.

9:50-10:15 am — Understanding BSEE; Organization and mission as it relates to the Arctic. *Mark Fesmire*: BSEE's role in the Arctic and the reorganization; Approval process; Environmental monitoring and areas to coordinate with NOAA. *David Moore*: TAR (Technical Assessment and Research) and the oil spill program.

10:15-10:30 am — Break

10:30 am-noon Understanding NOAA: Organization and mission as it relates to the Arctic.

1. *Kate Clark*: Understanding NOAA general organization and mission, and relating that to development of arctic oil and gas.
2. *Mary Baker*: Hazmat response, NRDA, Restoration.
3. *Tim McCune*: Understanding NMFS organization, mission, and relating that to development of arctic oil and gas.
4. *Steve Davis*: Understanding Alaska Region organization and mission, and relating that to development of arctic oil and gas (includes regulatory base).
5. *Jon Kurland*: Habitat conservation and protected resources responsibilities.
6. Alaska Fisheries Science Center research themes relative to arctic oil and gas development.
   John Bengtson: Arctic marine mammal research themes.
   Ed Farley: Offshore fish assessment themes, past and future.
   Jeep Rice: Nearshore fish, habitat, ShoreZone research themes.

Noon-1:30 pm Lunch

Part II: Identifying information needed to support management decisions

1:30-2:15 pm BOEM perspective: Management needs for scientific information - *Dee Williams*: Current BOEM process for establishing research priorities.

- Applications for mapping spilled oil in arctic water.
- Field evaluation of an unmanned aircraft system (UAS) for studying cetacean distribution, density, and habitat use in the Arctic.
- Workshop-interagency protocols for immediate on-scene arctic oil spill impact.
- Nearshore fish assemblages.
- Development of a sonar system.

2:15-2:30 pm NOAA perspective: Management needs for scientific information - *Doug DeMaster, Kate Clark:* What is the current NOAA process for establishing research priorities for both annual and longer-term information needs?

2:30-2:45 pm Break

Part III: Enhancing collaboration among BOEM/BSEE/NOAA

2:45-4:30 pm Enhancing collaboration among BOEM/BSEE/NOAA.
Facilitated by *David Christie*; 5 groups of 8 to discuss questions
Exercise Assessment Tool Worksheet (*Williams, Routhier*)

Trigger questions

1. What are the most important current and future information needs for each agency, how do they differ, and how are they similar? (Focus on information needed to inform management decisions.)
2. What process between NOAA and BOEM/BSEE would be most effective to facilitate identifying the high priority information needs necessary to inform both agencies' management and regulatory decisions? How could we ensure

that priorities are revisited and updated regularly and in a timely way?

3. What current partnerships should be strengthened and maintained? Do we need to improve interagency communication and collaboration with respect to scientific research? Do we need to improve our communications and collaborations with others (and to the public)? How could we do that?
4. How can we improve data delivery and sharing from projects of mutual interest?
5. How can we improve funding, logistics, and partnerships to support research of mutual interest?
6. As for information needs among NOAA/BOEM/BSEE, where are they the same and where are they different, particularly when considering time scales?

4:30-4:50 pm	Summary of the breakout groups, by question
4:50 pm	Announce start time for Day 2; housekeeping issues for Day 2, adjourn

February 24, 2012

8:00 am	Assemble
8:25 am	Call to order - *Jeep Rice*
8:30 am	Day 1 recap, key points or goals arising from discussions - *David Christie* Agency missions and responsibilities (Part I) Information needs (Part II) Interagency collaboration (Part III)
8:45 am	Regroup - *David Christie* Clarify goals for Day 2 and revise agenda as needed. Modify trigger questions.
9:00-10:30 am	Breakout groups, continue with trigger questions
10:30-10:45 am	Break
10:45-11:45 am	Discussions continue
11:45 am-12:15 pm	Breakout groups report out
12:15-1:30 pm	Lunch

Part IV: Identifying next steps and action items - *David Christie*

1:30-2:00 pm	Panel summary: What specific objectives have been identified to improve collaboration among NOAA/BOEM/BSEE to obtain the high priority scientific information needed to inform management and regulatory decisions?
2:00-2:30 pm	Open discussion and comment period

2:30-3:00 pm Panel discussion: What tasks and specific goals do these lead to (short, medium, long-term), who has the lead responsibility for each, and what is the timeline?

3:00-3:30 pm Open discussion and comment period

Part V: Wrap-up and closing comments

3:30-4:00 pm BOEM, BSEE, NOAA

4:00 pm Adjourn

Appendix 5: Workshop presentations

(note: go to http://seagrant.uaf.edu/conferences/2012/boem/presentations.php or follow web links).

1. NOAA research in support of the May 2011 MOU with BOEM/BSEE
   Doug DeMaster, Research and Science Director, NOAA/NMFS Alaska Fisheries Science Center, Juneau, AK

2. Timelines and responsibilities
   Jeep Rice, Program Manager, Habitat and Marine Chemistry Program, Auke Bay Laboratories, NOAA/NMFS Alaska Fisheries Science Center, Juneau, AK

3. Alaska OCS Region
   Sharon Warren, Regional Supervisor, BOEM Environment, Alaska OCS Region, Anchorage, AK

4. Bureau of Safety and Environment Enforcement
   Mark Fesmire, Regional Director, Alaska OCS Region, BSEE, Anchorage, AK

5. Oil spill planning, preparedness, and response in state and federal offshore waters
   David M. Moore, Oil Spill Response Supervisor, BSEE, Herndon, VA

6. A changing Arctic: NOAA's mission and arctic roles
   Kate Clark, Senior Policy Advisor to NOAA Deputy Under Secretary, Washington, DC

7. NOAA Office of Response and Restoration: Arctic activities and priorities
   Mary Baker, Chief, Assessment and Restoration Division, Office of Response and Restoration, Northwest and Great Lakes Branch, NOAA/National Ocean Service, Seattle, WA

8. Understanding NMFS organization, mission, and relating that to development of arctic oil and gas
   Tim McCune, Habitat Protection Division, NOAA/NMFS Headquarters, Silver Spring, MD

9. Grand challenges for science supporting NOAA's missions in resource management
   Steven K. Davis, Regional Oil and Gas Coordinator, NOAA/NMFS Alaska Regional Office, Juneau, AK

10. Alaska Region, habitat conservation and protected resources responsibilities
    Jon Kurland, Assistant Regional Administrator, Protected Resources Division, NOAA/NMFS Alaska Regional Office, Juneau, AK

11. Alaska Fisheries Science Center arctic marine mammal research themes
    John L. Bengtson, Director, National Marine Mammal Laboratory, NOAA/NMFS Alaska Fisheries Science Center, Seattle, WA

12. Northern Bering and Chukchi Sea research (Arctic Eis)
    Ed Farley, Program Manager, Ecosystem Monitoring and Assessment Program, Auke Bay Laboratories, NOAA/NMFS Alaska Fisheries Science Center, Juneau, AK

13. Habitat and Marine Chemistry Group at Auke Bay Labs
    Jeep Rice, Program Manager, Habitat and Marine Chemistry Program, Auke Bay Laboratories, NOAA/NMFS Alaska Fisheries Science Center, Juneau, AK

14. BOEM Environmental Studies Program
    Dee Williams, Chief, Environmental Sciences Management Section, Alaska OCS Region, Anchorage, AK

Appendix 6: Workshop participants

Sarah Allan	**NOAA** – Natural Resource Damage Assessment, National Ocean Service, Seattle, WA (sarah.allen@noaa.gov).
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National Oceanic and Atmospheric Administration Department of Commerce

Bureau of Ocean Energy Management Department of the Interior

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